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February 9, 2004

Ex Parte Memorandum

Marlene H. Dortch, Secretary
Federal Communications Commission
445 – 12th Street, S.W., Room TW-A325
Washington, DC 20554

Re: In the Matter of Petition of Wireless Consumers Alliance *et al.* for a Declaratory Ruling Regarding Cellphone 911 Requirements in Response to Referral from the United States District Court for the Northern District of Illinois, dated October 3, 2003, WT Docket No. 99-328

In the Matter of Petition for Declaratory Ruling on 911 Call Processing Modes, AT&T Wireless Services, Inc., *et al.*, dated October 14, 2003, WT Docket No. 99-328

Dear Ms. Dortch:

Transmitted herewith for filing on behalf of the Wireless Consumers Alliance, Inc., *et al.* (collectively "WCA"), is their *ex parte* memorandum in the captioned proceedings in rebuttal to certain claims made by the industry parties in their meetings with Commissioners and staff. The enclosed rebuttal has redacted material subject to a protective order entered in the civil litigation which spawned the captioned petitions.[1] Accordingly, a paper copy of this memorandum which includes the confidential material is contemporaneously being filed with the Secretary with a request for confidential treatment pursuant to Section 0.459 of the Commission's rules, 47 C.F.R. 0.459.

Should there be any questions concerning this filing, kindly contact the undersigned.

Very truly yours,

s/Kenneth E. Hardman
Kenneth E. Hardman

One of the attorneys for
Wireless Consumers Alliance, Inc., et al.

Enclosure

[1] *In re Wireless Telephone 911 Calls Litigation*, MDL No. 1521, Civil Action No. 03-CV-2597 (N. D. IL, Eastern Div.) (26 June 2003)..

EX PARTE SUBMISSION OF WIRELESS CONSUMERS ALLIANCE *ET AL.* ("WCA"):

CELLPHONE MANUFACTURERS' CONTENTIONS AND WCA'S RESPONSES

WCA has filed a Petition for Declaratory Ruling,[1] requesting the Commission to respond to questions posed by a federal court regarding the Commission's wireless 911 requirements. The Court's questions concern the interpretation of conditions imposed by the Commission on the use of the A/B-IR method of 911 wireless call completion in its *Second Report and Order* in the *Enhanced 911 Emergency Calling Systems* rulemaking, CC Docket No. 94-102, 14 F.C.C.R. 10954 (June 9, 1999) (the "*Second Report and Order*").

In its Petition, WCA has urged the Commission to inform the court that the *Second Report and Order* requires cellphone manufacturers to so construct and program their handsets that if a 911 call from a cellphone operating on the preferred cellular carrier in analog mode has not been delivered to the landline network within 17 seconds after the call is placed, the handset will seek to complete the call with the non-preferred cellular carrier (the "17-Second Requirement"). This submission will respond to arguments advanced against the Petition by certain cellphone manufacturers (the "Cellphone Manufacturers").

Cellphone Manufacturers' Contention No. 1 – No Direct Language Supports WCA's Position

The Cellphone Manufacturers argue that there is no direct language in the *Second Report and Order* supporting WCA's contention that a wireless 911 call is not complete until it has been delivered to the landline carrier. They assert that the language of the *Second Report and Order* is equally consistent with their position that a 911 call is considered complete when the handset has obtained a voice channel assignment from the base station and entered into "Conversation State" without regard to whether or not voice conversation is possible.

WCA's Response

The *Second Report and Order* ***explicitly states*** that "if the preferred cellular carrier has not successfully delivered the call to the landline carrier within 17 seconds after the call is placed," the handset should "seek to complete the call with the non-preferred cellular carrier." *Id.* The *Second Report and Order* ***expressly rejects*** the cellphone manufacturers' contention that a 911 call is considered complete when the handset has obtained a voice channel assignment from the base station and entered into "Conversation State." *Id.*, n.52. *See Exhibit A, attached, for further discussion.*

Cellphone Manufacturers' Contention No. 2 – WCA Has Changed Its Position and Has Argued that a 911 Call Is Not Complete until the 911 Operator Answers the Call

The Cellphone Manufacturers contend that WCA has changed its position. They assert that WCA has argued at various times that a 911 call should not be considered complete under the *Second Report and Order* unless it has been (1) delivered to the wireline carrier's central office, (2) delivered to the 911 PSAP, or (3) answered by a live operator.

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[1] *In the Matter of Petition of Wireless Consumers Alliance et al. for a Declaratory Ruling Regarding Cellphone 911 Requirements in Response to Referral from the United States District Court for the Northern District of Illinois*, Docket No. 99-328.

WCA's Response

WCA has not changed its position. WCA has never argued that the *Second Report and Order* requires 911 calls to be delivered to the central office, delivered to the 911 PSAP or answered by a live 911 operator to achieve call completion. WCA's position has always been the same – under the *Second Report and Order*, a 911 call is considered complete when both the handset and the base station have achieved Conversation State in that each is able to receive transmissions from the other. When that occurs, the base station instantaneously delivers the call to the landline network. *See Exhibit B for further discussion.*

Cellphone Manufacturers' Contention No. 3 – A May, 2003 Staff Letter Proves that Assignment of a Voice Channel Equals Call Completion

The Cellphone Manufacturers assert that a May, 2003 letter from John Muleta, Chief of the Wireless Telecommunications Bureau, to Robert Pettit, counsel for Nokia, Inc., establishes that a 911 call is complete for purposes of the 17-Second Requirement when the handset receives a voice channel assignment from the base station and enters "Conversation State."

WCA's Response

The Muleta Letter ***does not*** state that assignment of a voice channel within 17 seconds satisfies the Commission's requirements. In the secret, closed-door negotiations [redacted] Moreover, the WTB did not purport to change or repeal, and would not have had the authority to change or repeal, the 17-Second Requirement. *See Exhibit C for further discussion.*

Cellphone Manufacturers' Contention No. 4 – The Implementation of the 17-Second Requirement Would Necessitate a Change to the Analog Cellphone Standards

The Cellphone Manufacturers suggest that the 17-Second Requirement, as described in the *Second Report and Order*, would necessitate a disruptive change to the Commission's analog standards for wireless telephone calls.

WCA's Response

This contention is categorically wrong. No changes to the analog standards were necessary when the 17-Second Requirement was adopted in 1999 and none are necessary now. The 17-Second Requirement was fully consistent with the Commission's analog standards when it was adopted and is still consistent with them. Implementation of the 17-Second Requirement does not require changes to base station operation, deployment of voice recognition technology or any other disruptive technological changes. In addition, two [redacted] phones tested by Petitioners satisfied the rule except for taking longer than 17 seconds. Clearly, compliance is possible under existing standards. *See Exhibit D for further discussion.*

Cellphone Industry Contention No. 5 – No Lock-In Victims Have Come Forward Recently

The Cellphone Manufacturers argue that the FCC should excuse their non-compliance with the 17-Second Requirement because no additional victims of lock-in have come forward recently.

WCA's Response

This argument is outrageous. The notion that WCA should be required to parade additional lock-in victims before the Commission to justify seeking enforcement of duly enacted Commission requirements is fatuous, especially in view of the fact that the Commission adopted its 911 conditions in the first place because it found that lock-in was killing people. Additional victims have not come forward before the Commission in part because there has been no pending proceeding before the Commission since 1999 to provide a reason for them to do so. Moreover, although it is undeniable that lock-in is still causing deaths and injuries – it is estimated that more than 1.5 million 911 cellphone calls annually fail to go through -- finding the victims is difficult. Among other things, the victims do not know the reasons why their 911 calls were not completed. The point, though, is this: People died and requirements were imposed by an agency of the United States government to protect the public from that peril. How many deaths or injuries do there have to be before those requirements are complied with? *See Exhibit E for further discussion.*

EXHIBIT A

The Language of the *Second Report and Order* Explicitly Supports the Position Taken by WCA in its Petition for Declaratory Ruling and Expressly Rejects the Position Advocated by the Cellphone Manufacturers

The language of the *Second Report and Order* explicitly supports the position taken by WCA in its Petition for Declaratory Ruling and expressly rejects the interpretation of the 17-Second Requirement advocated by the Cellphone Manufacturers. The Cellphone Manufacturers' position is that under the *Second Report and Order*, "call completion" for a wireless 911 call made in analog mode occurs when the cellphone handset receives a voice channel assignment from the base station and enters "Conversation State." The Cellphone Manufacturers argue that as long as a cellphone reaches this stage within 17 seconds from the time the call is placed, it complies with the 17-Second Requirement. This was the approach that the industry advocated in the comments it submitted to the Commission prior to the adoption of the *Second Report and Order*. However, the Commission, in the *Second Report and Order*, ***rejected*** the industry's definition of "call completion."

In the *Second Report and Order*, the Commission found the industry's definition of "call completion" to be insufficient because it treated a call as successful even when the base station could not receive the handset's transmissions – *i.e.*, where there was no possibility that an actual conversation could take place.

> Further, the algorithm [the industry's proposal] treats a call as completed when the handset is in what is termed "Conversation State." However, at this stage the handset has not necessarily been connected with the wireless carrier or the 911 PSAP.

Second Report and Order, ¶36 (emphasis added).

The Commission therefore held that a cellphone 911 call would not be considered to have been successfully completed unless ***both*** the handset ***and*** the base station have reached "Conversation State" – that is, unless a voice communication path is open and available in *both* directions, from the handset to the base station *as well as* from the base station to the handset. Thus, the Commission stated that a cellphone 911 call would not be deemed to be successful unless the handset's transmission on the voice channel had been ***actually received*** at the base station and delivered to the landline carrier.

> After a handset receives a voice channel assignment and begins transmission to a base station on that channel, Conversation State is reached. As noted, however, at this stage, the handset's voice channel transmission has not necessarily been received at the base station, and thus the handset may not necessarily be able to use the voice channel to communicate with the base station (and thence to the landline network). In establishing a time limit for delivering

> the call to the landline carrier, we are seeking to ensure that communication between the handset and the base station on the voice channel ***goes beyond Conversation State and reaches the point where the handset's voice channel transmission is indeed received at the base station***.

Second Report and Order, n.52 (emphasis added).[1]

The Commission therefore did not approve the industry's A/B-IR method ***as proposed.*** Instead, the Commission held that the A/B-IR method would be allowed ***only*** if cellphone handsets met two additional conditions that had not been included in the industry's proposal:

1. That the handset give "effective feedback" to let the caller know when a 911 call is in the process of being connected; and

2. That the handset attempt to complete the call on the non-preferred carrier's system if the call has not been successfully ***delivered to the landline carrier*** within 17 seconds (the "17-Second Requirement").

With respect to the 17-Second Requirement, the Commission stated:

> In general terms, the handset should seek to complete the call with the non-preferred cellular carrier ***if the preferred cellular carrier has not successfully delivered the call to the landline carrier*** within 17 seconds after the call is placed. ¶41 (emphasis added).

The Commission also described how the 17-second time limit had been calculated:

> The 17-second period is also generally consistent with the combined time periods for two basic call processing tasks that must be performed and completed if a call attempt is to be successful after the call is sent: in the first task a handset waits up to 12 seconds to receive a voice channel assignment from a base station; in the second task, the base station waits up to 5 seconds ***to receive a voice channel transmission from the handset***.

Second Report and Order, ¶41 (emphasis added).

This language refutes defendants' position that receipt of a voice channel assignment by the handset is all that is required to take place within 17 seconds. To the contrary, the above-quoted passage from ¶41 of the *Second Report and Order* makes

[1] It is undisputed that once a handset's transmission is received by the base station, it is instantaneously delivered to the landline carrier. Because the receipt of the transmission by the base station and its delivery to the landline carrier occur essentially simultaneously, the *Second Report and Order* treats these two formulations interchangeably.

clear that there are ***two*** tasks that must be performed within 17 seconds, and that the base station's assignment of a voice channel to the handset is only the "first task," which will occur within "up to 12 seconds." ¶41 states that ***after*** the voice channel assignment, there is a "second task" that must be achieved within an additional 5 seconds – namely, the base station's receipt of a transmission from the handset on the voice channel. (Delivery to the landline carrier occurs instantaneously after the base station receives the handset's transmission.) Until that happens, call completion within the meaning of the *Second Report and Order* has not occurred.

The industry's interpretation of the *Second Report and Order* is also invalid because it is inconsistent with the reason why the Commission adopted the 17-Second Requirement in the first place. The 17-Second Requirement was imposed principally to combat a phenomenon called "lock-in," which the Commission found was preventing a significant number of cellphone 911 calls from being connected. *Id.* at ¶17. The Commission found that where the cellphone handset in a 911 call received a voice channel assignment from the base station but the signal from the handset to the base station over the voice channel was too weak to establish or maintain voice communications, the handset could become "locked in" to the preferred carrier and the call would not be completed. *Second Report and Order*, ¶16.

> Under those circumstances the handset would be unable to complete the 911 call to the preferred carrier, yet also prevented from switching to the other system even if the handset has the capability to contact that carrier. This problem is not challenged by other technical studies, and the wireless industry agrees that handsets can lock in to one carrier, even if the handset cannot communicate with that carrier….

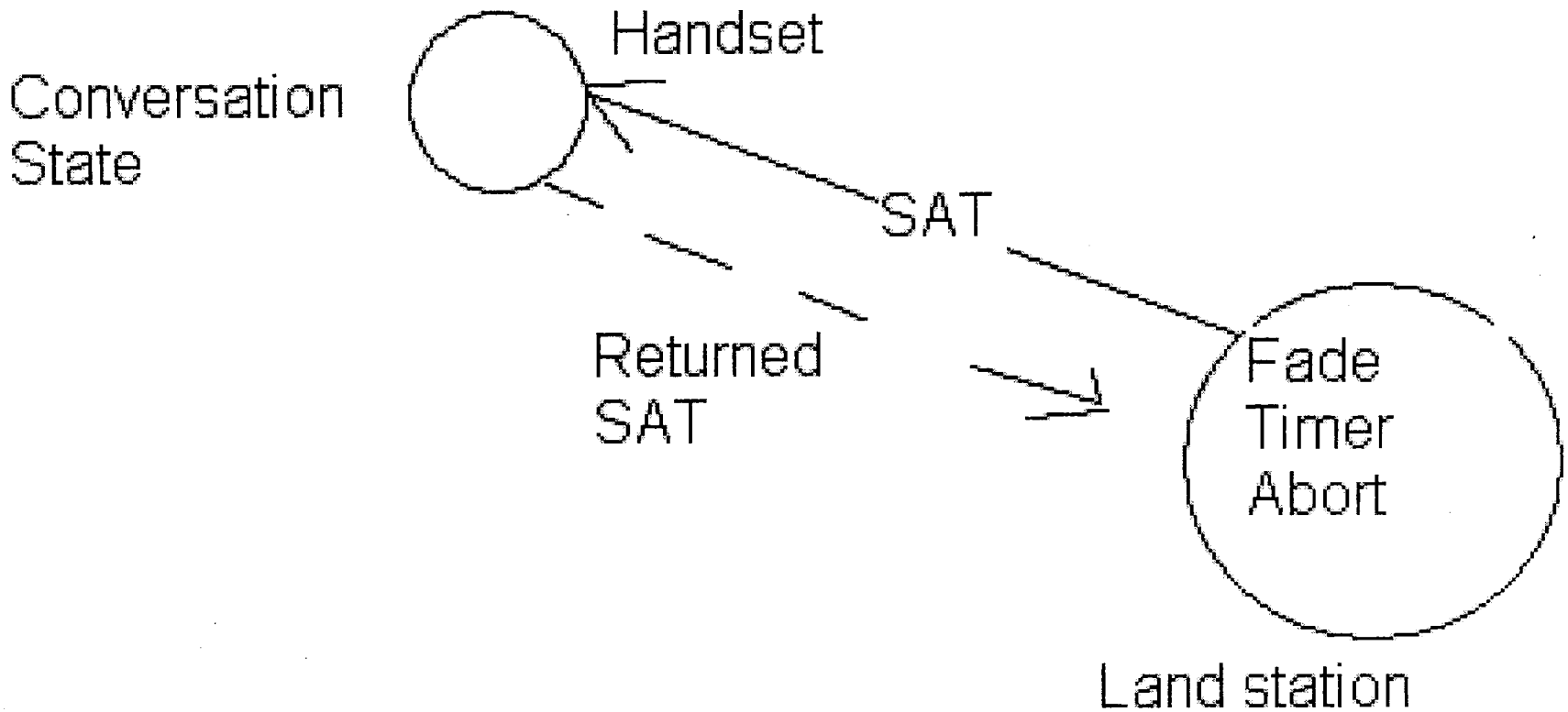
Second Report and Order, ¶16. *See* chart, "Cellular Lock-In Scenario," Attachment 1 to this Exhibit.

The industry's interpretation of the 17-Second Requirement, however, fails to combat "lock-in" because it treats cellphone calls as having been successfully completed even when a lock-in condition exists – that is, even when the base station has assigned a voice channel to the handset but the handset is unable to communicate with the base station. Under the industry's interpretation of the 17-Second Requirement, therefore, that requirement would not accomplish the purposes for which the Commission adopted it.

The strenuous arguments presented by the Cellphone Manufacturers must be viewed for what they truly are – an affront to the Commission and its rules and an affront to the wireless customer who trusted that the product they purchased was compliant with the Commission rules and would improve their ability to get help when they most needed it by dialing 911.

ATTACHMENT 1 TO

EXHIBIT A



Cellular Lock-In Scenario

EXHIBIT B

The Cellphone Manufacturers Have Distorted Petitioners' Position

The cellphone manufacturers have sought to engender confusion by distorting WCA's position. They claim that WCA has argued that a 911 cellphone call is not complete unless it has been either (1) delivered to the wireline carrier's central office, (2) delivered to the 911 PSAP, or (3) answered by a live 911 operator. Moreover, they accuse WCA of having changed its position during the course of the proceedings before the Commission and the court. However, the cellphone manufacturers are wrong.

WCA does not argue, and has never argued, that a 911 call must be delivered to the central office or the PSAP, or answered by a live operator, to be successfully completed. WCA does not contend, and has never contended, that the handset must be able to determine within 17 seconds, through voice recognition technology or otherwise, that a call has actually been answered by an operator.

What WCA does contend is that the *Second Report and Order* requires cellphone handsets operating in analog mode to switch to the non-preferred carrier's frequencies whenever the handset's voice channel transmission has not been successfully received by the base station within 17 seconds. WCA submits that the 17-Second Requirement which the Commission adopted in its *Second Report and Order* is not satisfied if the *handset* merely obtains a voice channel assignment and thereby enters into "Conversation State" within 17 seconds. Rather, to achieve call completion that satisfies the 17-Second Requirement, *both* the handset *and* the base station must have entered into "Conversation State" within 17 seconds, such that a communication path exists in both directions, from the handset to the preferred carrier's base station *as well as* from the base station to the handset. Once that happens, the Commission's requirements for A/B-IR are satisfied. See chart, "Successful Cellular Call," Attachment 1 to this Exhibit.

At this stage, both the handset and the base station are in Conversation State, and a usable voice channel is established. Once this occurs, the call is instantaneously delivered to the landline network. The base station will not attempt to dial the 911 operator until it and the handset ***have both*** reached Conversation State. Thus, in the brief it filed in Court in opposition to defendants' motion to stay the federal litigation, WCA correctly stated that under the *Second Report and Order,* a 911 call would not be considered to have been successfully completed unless the call had been "transmitted to the base station and then to the landline phone system." Plaintiffs Opposition to the Defendants' Joint Motion for Primary Jurisdiction dated July 18, 2003.

While the concept is crystal clear, WCA's attorney, on one or more occasions, sometimes described it with a slightly differing choice of phraseology or emphasis, not to change positions but simply to make it more comprehensible to a lay audience – such as the federal judge, who is not knowledgeable about cellphone technology or terminology. Thus, at a hearing in the federal case, WCA's attorney described the stage of a 911 call that constitutes call completion as "connection to the base station" or "connection to the

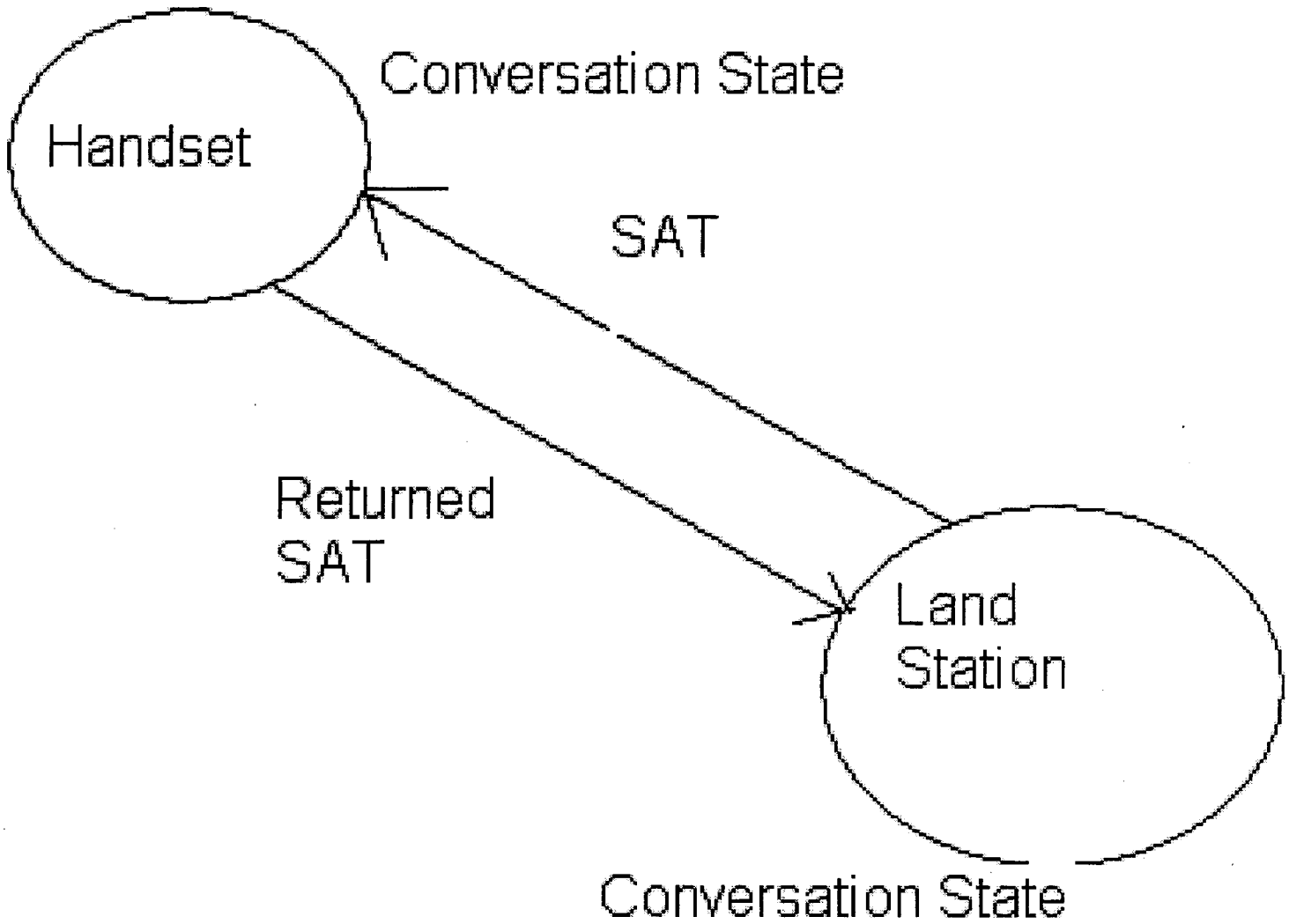
911 operator." Defendants have now seized on these innocent differences in description to argue that WCA changed its position and has taken positions at odds with the *Second Report and Order*. Nothing could be further from the truth. The phrase, "connection to the base station" is merely a colloquial way of describing receipt of the handset's transmission by the base station. It is therefore an ***accurate*** representation of what must be done within 17 seconds under the *Second Report and Order*, and does not constitute a "change of position." Counsel's use of the phrase "connection to the 911 operator" was merely intended to convey to the Court that under the *Second Report and Order*, cellphone handsets were required to switch to the non-preferred carrier if they failed to deliver their call to 911 through the base station to the landline network so that it could reach the 911 operator.

The Commission, in its press release issued with the *Second Report and Order*, similarly used colloquial language when it described the 17-Second Requirement as follows: "If the handset does not ***receive confirmation that the call is ringing at the 911 location*** within that 17 seconds, the handset would switch the call to the other cellular carrier." "FCC Adopts Wireless 911 Rules," May 13, 1999 at p. 2 (Attachment 2 to this Exhibit). That description is not technically precise, but it is appropriate for the sort of non-technical audience that would be likely to read a Press Release, because it dramatizes that call completion requires a pathway running in both directions between the handset and the base station. Ringing will only occur if a successful path is established between the handset and the base station, *i.e.*, both have entered Conversation State. The Commission did not mean that the handset literally needed to be able to detect "ringing," but used the term to make the rule more understandable to the lay public.

Notably, the one thing all these descriptions have in common is that as a prerequisite to all of them, a return signal from the handset must be received at the base station. Once ***both*** the handset ***and*** the base station have entered Conversation State, the Commission's requirements are satisfied.

ATTACHMENT 1 TO

EXHIBIT B



Successful Cellular Call

ATTACHMENT 2 TO

EXHIBIT B

Text | WordPerfect
Statements: Tristani

NEWS

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FOR IMMEDIATE RELEASE
May 13, 1999

NEWS MEDIA CONTACT:
Meribeth McCarrick at (202) 418-0654

FCC ADOPTS WIRELESS 911 RULES
Rules Will Improve Accessibility of 911 Service for Wireless Users

Today the Federal Communications Commission adopted rules that will improve the ability of cellular phone users to complete wireless 911 calls. Today's action will improve the security and safety of analog cellular users, especially in rural and suburban areas, by approving three mechanisms any of which will result in more wireless 911 calls being completed than occurs today.

As part of its efforts to promote public safety, the Commission adopted the Enhanced 911 (E911) First Report and Order in 1996, which among other things required that cellular carriers complete all 911 calls, not just those of their subscribers. At the same time, the Commission adopted a Second Notice of Proposed Rulemaking (NPRM) to develop additional means of improving E911 system performance to serve public safety needs. One issue in the Second NPRM concerned proposals to improve the transmission of 911 calls, particularly from locations where the wireless caller's preferred carrier has a "blank spot" - an area where the system's radio signal is very weak or non-existent. Today's in a Second Report and Order (Order) addresses this particular issue.

Specifics of today's Order:

The Order requires that analog cellular phones, as well as dual mode (digital and analog) phones when operating in the analog mode, include a separate capability for processing 911 calls that permits those calls to be handled, where necessary, by either cellular carrier. The purpose of this separate capability is to improve 911 reliability, increase the probability that 911 calls will be efficiently

and successfully transmitted to public safety agencies, and help ensure that wireless service will be maintained for the duration of the 911 calls. This requirement will become effective nine months from today. The Order also sets principles for 911 call completion methods that would satisfy the Commission's rules, and approves three methods that have been proposed in the record -- Automatic A/B Roaming-Intelligent Retry (with some modifications), Adequate/Strongest Signal, and Selective Retry.

Automatic A/B Roaming - Intelligent Retry: With this method, when a consumer dials 911 the handset would seek to complete the call with the consumer's preferred carrier, if possible. If the handset fails to receive a signal, the handset would attempt to complete the call via the non-preferred carrier and would continue to rescan and reattempt the call until it is completed, the user terminates the call, or the handset loses power. The Order approves this mode, subject to two conditions that address the possibility that this mode may cause long set-up times in some cases. These conditions are: (1) that the handset provide effective feedback to inform the user when 911 call processing is underway, such as an audible tone or message and a visual status report, and (2) that, in any case once a 911 is sent, the handset not spend more than 17 seconds seeking to complete the call with the preferred carrier before reattempting the call with the non-preferred carrier. If the handset does not receive confirmation that the call is ringing at the 911 location within that 17 seconds, the handset would switch the call to the other cellular carrier.

Adequate/Strongest Signal: With this method the handset would first scan the control channels of a consumer's preferred carrier to determine whether the carrier offered an adequate control channel, defined as at least -85 dBm. If so, the handset would attempt to complete the call with the preferred carrier. If the preferred carrier's signal strength is below the acceptable threshold gate, the handset would seek to complete the 911 call with whichever cellular carrier provided the strongest control channel signal.

Selective Retry: Selective Retry would employ a separate 911 button on the handset to route 911 calls (an option that could also be adopted with other 911 calling modes). The first time the caller pushes the 911 button, the handset would attempt to complete the 911 call using the customer's preferred carrier. In the event that carrier is unable to complete the call, or the call is completed but interrupted, or the user is dissatisfied with the voice quality or some other aspects of the call, the caller can push the 911 button again and the handset will attempt to complete the 911 call via the other cellular carrier.

These improvements in 911 call completion should significantly increase the reliability of using wireless phones to reach emergency help. Calls that cannot be handled by one of the cellular carriers will, under this Order, be routed to the other carrier for transmission to emergency dispatchers. While this should represent an important improvement in completing 911 calls, especially in areas

where cellular coverage is less complete, it is also important to recognize the problems and limits that remain in completing 911 calls. For example, after today there will still remain locations not served by any cellular carrier. Moreover, the Order adopted today only applies to new handsets operating in the analog mode, not to existing handsets, dual mode phones operating in digital mode, or to purely digital handsets.

Even with these qualifications, however, the Commission believes the steps taken in this Order will significantly improve the reliability of the most vital use of wireless phones, reaching needed help in an emergency. The Commission will continue to explore ways to improve wireless 911 service because this is an essential element to improving public safety.

Action by the Commission, May 13, 1999, by Second Report and Order (FCC 99-96). Chairman Kennard, Commissioners Ness, Furchtgott-Roth, Powell and Tristani with Commissioner Tristani issuing a separate statement.

News Media contact: Meribeth McCarrick at 202-418-0654, via e-mail mmccarri@fcc.gov or TTY at (202) 418-7233.

Wireless Telecommunications Bureau contact: Dan Grosh (Policy Division) at 418-1310, via e-mail: dgrosh@fcc.gov, or TTY at (202) 418-7233.

Report No. WT 99-13
Docket No. CC Docket No. 94-102

EXHIBIT C

The Wireless Telecommunications Bureau's May, 2003 Letter to Nokia's Counsel Does Not Support the Proposition that the Mere Assignment of a Voice Channel is All that is Needed for Call Completion

The Cellphone Manufacturers cite a letter from John Muleta, Chief of the WTB, to Robert Pettit, Nokia's counsel, dated May 28, 2003 (the "Muleta Letter"), as evidence that the Commission has endorsed the view that all that is required for call completion is that the handset receive a voice channel assignment. However, the Muleta Letter provides no support to the Cellphone Manufacturers' position.

First, the Cellphone Manufacturers have mischaracterized the Muleta Letter. The principal language from the Muleta Letter on which the Cellphone Manufacturers rely is as follows: "Under Nokia's algorithm, as approved [in the Nokia Order], access attempts are deemed unsuccessful if the handset has not received a voice or traffic channel assignment within 17 seconds." However, this language does not support the Cellphone Manufacturers' position. It merely stands for the proposition that if a handset has not received a voice or traffic channel assignment within 17 seconds, the access attempt is deemed unsuccessful. It ***does not*** say that a call is deemed ***successful*** if a voice channel assignment is made within 17 seconds.

The *Second Report and Order* is absolutely clear in stating that the mere assignment of a voice channel ***is not*** sufficient for a call to be deemed to have been successfully completed under the Commission's 17-Second Requirement. Subsequent staff pronouncements prior to the Muleta Letter have confirmed that conclusion. The Muleta Letter did not purport to change or repeal the 17-Second Requirement, as enunciated in the *Second Report and Order*. To the contrary, the Muleta Letter itself relies on Nokia's counsel's December 30, 1999 letter to the Commission, wherein Nokia states that under its proposed 911 calling methodology ***it will deliver a call to the landline carrier within 17 seconds***. See Muleta Letter at 2 n.10; December 30, 1999 letter from Nokia to the Commission, Attachments 1 and 2 to this Exhibit.

Furthermore, during the extensive closed-door negotiations that led to the issuance of the Muleta Letter – negotiations that were never disclosed to WCA or the public – [redacted]

[redacted]

Next, Nokia failed to file the *ex parte* Pettit Letter electronically, which would have enabled the public to have immediate access to the letter and an opportunity to comment. Instead, the Muleta Letter, which was filed electronically two days after the

earlier-written Pettit Letter, and was thus a *fait accompli* by the time the public became aware of Pettit's initial letter.

Attachment 1

To

Exhibit C

FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

DA 03-1868
May 30, 2003

Mr. Robert L. Pettit
Wiley Rein & Fielding LLP
1776 K Street, N.W.
Washington, D.C. 20006

Dear Mr. Pettit:

This letter responds to your letter on behalf of Nokia Inc. (Nokia) dated May 27, 2003,[1] seeking clarification of the Wireless Telecommunications Bureau's (Bureau's) *Nokia Waiver Order*.[2] You explain that a clarification of the *Nokia Waiver Order* is needed so that Nokia's training program will accurately cover its requirements.

In the *Second Report and Order*,[3] the Commission adopted section 22.921 to help improve 911 call completion.[4] In that order, the Commission delegated authority to the Wireless Telecommunications Bureau (Bureau) to consider and approve, deny, or approve with modification new or revised 911 call processing modes.[5]

On October 27, 1999, Nokia filed a letter with the Bureau requesting approval for a 911 call completion method for Nokia's multi-mode products.[6] Nokia's method was substantially similar to the Automatic A/B Roaming-Intelligent Retry (A/B-IR) method approved by the Commission.[7] Based on its delegated authority and its finding that the method appeared reasonable in both analog and digital modes, the Bureau approved Nokia's method[8] subject to two conditions:

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1 *See* Letter from Robert L. Pettit, Counsel for Nokia, Inc., to John Muleta, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (May 27, 2003) (Request).

2 911 Call Processing Modes, WTB Docket No. 99-328, *Order*, 15 FCC Rcd 1911 (2000) (*Nokia Waiver Order*).

3 Revision of the Commission's Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Second Report and Order, 14 FCC Rcd 10954 (1999) (*Second Report and Order*).

4 47 C.F.R. § 22.921. This rule requires new analog wireless handsets, and multimode handsets when operating in analog mode, to be able to complete 911 calls to either analog carrier in an area, regardless of the programming of the handset for non-911 calls. The Commission sought to implement this rule through an equipment manufacturing requirement and its equipment authorization process while believing that implementation of the rule would require a relatively minor change to the phone's programming. *See Second Report and Order*, 14 FCC Rcd at 10992- 93.

5 *Second Report and Order*, 14 FCC Rcd at 10993, 10995.

6 Letter from David Siddall, Counsel to Nokia, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Oct. 27, 1999 (Nokia's 1999 Request).

7 In the *Second Report and Order*, the Commission approved three proposed 911 call processing modes including the A/B-IR method, while stating general principles for other acceptable modes and encouraging the development of further improvements in 911 call completion. *See Second Report and Order* at 10993. *See also Nokia Waiver Order*, 15 FCC Rcd at 1913.

8 *Nokia Waiver Order*, 15 FCC Rcd at 1914-15. The Bureau also granted Nokia additional time to complete software changes to implement its method. *See id.* at 1915.

First, the *Nokia Waiver Order* approved, as a feature in Nokia's method, customer feedback regarding the status of the call until the call is completed.[9] Accordingly, the handset must provide effective feedback to inform the user when 911 call processing is underway and has not finished.

Second, Nokia's method included a time limit for access attempts similar to the time requirement for the A/B-IR method.[10] Under the *Nokia Waiver Order*, the 17-second time limit is applicable to access attempts.[11] The *Nokia Waiver Order* approved Nokia's method with the understanding that the handset must first attempt to complete the 911 call with the carrier operating the presently acquired system, and if the access attempts on that system are not successful within 17 seconds, the handset must automatically attempt to make the call on another network.[12] Under Nokia's algorithm, as approved, access attempts are deemed unsuccessful if the handset has not received a voice or traffic channel assignment within 17 seconds. Accordingly, the initial access attempts on the presently acquired system must not exceed 17 seconds, regardless of whether the handset is operating in the digital or analog mode, before the handset attempts to call on another network.[13]

Overall, then, for purposes of its training program, Nokia may consider that its revised 911 call processing method was approved as described in its October 27, 1999 request, subject to the two conditions described above and, specifically, to the modification of its handsets to set a time limit on access attempts as described in its December 30, 1999 *ex parte* Letter.

I hope that this clarification will assist you in ensuring Nokia's compliance with the requirements of the *Nokia Waiver Order*.

Sincerely,

John B. Muleta

Chief,
Wireless Telecommunications Bureau

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9 *Nokia Waiver Order*, 15 FCC Rcd at 1912-13, and 1915.

10 In response to WCA's comments that Nokia's proposal did not specify the duration of the call attempt with the preferred carrier, Nokia clarified that its multi-mode handsets will comply with the time limits for access attempts approved by the Commission for the A/B-IR method, specifically the 17-second limit, whether the handset is operating in the digital or the analog mode. Letter from Davis R. Siddall, Counsel to Nokia, Inc., to Magalie Roman Salas, Secretary, Federal Communications Commission, WT Docket No. 99-328, at 3, n.7 (Dec. 30, 1999) (Nokia December 30 *ex parte* Letter). The 17-second time limit for initial call attempt with the preferred carrier limits possible lock-in problems as well as other delays when the call cannot be handled by that carrier for some reason. *See Nokia Waiver Order*, 15 FCC Rcd at 1913. *See also Second Report and Order*, 14 FCC Rcd at 10988.

11 *See Nokia Waiver Order*, 15 FCC Rcd at 1913-14.

12 *Nokia Waiver Order*, 15 FCC Rcd at 1913-15.

13 The Bureau found that the carrier operating the "presently acquired system," normally the caller's preferred carrier, is likely to be the carrier best able to deliver the call quickly and reliably while supporting the handset's features, such as location capability when that feature becomes available. *See Nokia Waiver Order*, 15 FCC Rcd at 1914.

Attachment 2

To

Exhibit C

VERNER · LIIPFERT
BERNHARD · McPHERSON AND HAND
CHARTERED

901 - 15TH STREET, N.W.
WASHINGTON, D.C. 20005-2301
(202) 371-6000
FAX: (202) 371-6279

December 30, 1999

HAND DELIVERY

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: 911 Call Processing Method That Includes Digital and Analog Modes Proposed by Nokia, Inc.
WT Docket No. 99-328

Dear Ms. Salas:

On December 20, 1999, the Wireless Consumers Alliance filed an *ex parte* letter in the above-captioned proceeding in which it makes a number of incorrect and misleading statements that Nokia wishes to correct. Nokia also is providing additional information so that the public and the Commission staff can better understand the clear public interest in granting our proposal to allow multi-mode wireless phones to complete emergency calls using both the analog and digital channels on which they are capable of operating. Grant of our request will increase the chances that a consumer in distress will be successful in quickly summoning emergency assistance using their multi-mode wireless phone.

In both its letter and its comments in this proceeding, the Alliance opposes allowing Nokia's multi-mode handsets to use both the digital and analog modes they are capable of operating on for emergency calls. This is a misguided position that will measurably lessen the chances of completing emergency 9-1-1 calls for *millions* of wireless subscribers. The result of

the Alliance's position would be that millions of multi-mode (including multi-band) handset users would be disadvantaged in using the full digital capabilities of their handsets when they are most desperate to complete 9-1-1 calls.

The letter from the Alliance opposing Nokia's request makes clear that its opposition is based upon mistakes in fact and technology. First, considering PCS at 1900 MHz, as the Commission is well aware, there were an estimated *six million plus* digital users in December, 1998, subscribing to wireless telephony services. These are not personal digital assistant, such as the Palm Pilot services, as the Alliance mistakenly states. They are full-fledged digital two-way telephony systems functionally similar to cellular systems. Both cellular and PCS systems may provide ancillary data services, but voice telephony is universally provided. One year ago -- in December, 1998 -- there existed up to 4 PCS systems constructed and in service in every urban area of the United States in the 1900 MHz PCS bands.[1]

Second, within the cellular (800 MHz) bands, digital systems are less crowded because digital systems acquire additional capacity through gains in efficiency. Consumers and carriers are converting to digital at an astounding pace to secure the price and service benefits of digital technology. The number of digital handsets grew at the annual percentage rate of 160 percent between 1997 and 1998.[2] And yet, despite this rapid migration to digital technology, the Alliance opposes Nokia's proposal that digital multi-mode phones quickly implement a 9-1-1 call completion method that complies with the Commission's intent when it adopted rules for analog systems.

In both its letter and its comments, the Alliance states that Nokia's proposal does nothing to address the "lock in" problem and that, in fact, Nokia's handsets would lock in to a system on which it failed to complete the emergency call.[3] This is not the case. Nokia's phones will be designed to combat lock-in in the same manner that the Commission has allowed for other call completion methods.

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[1] These figures are for 1998, as set forth in the Commission's *Fourth Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, FCC 99-136, released June 24, 1999, at p. 31 and Table 10 at p. B-16.

[2] *Id.* at Table 5, p. B-7.

[3] Alliance Comments at 7; Letter at 2.

In the *Second Report and Order*, the Commission noted that any call completion method "should address the lock in problem in a reasonable and effective way that substantially reduces or eliminates the likelihood that a 911 call might be locked in on the system of a cellular carrier that is unable to provide a usable voice communication channel."[4] In its discussion of the approved Automatic A/B Roaming - Intelligent Retry Method, the Commission noted that the sequential algorithm procedure that the method employs, whereby the handset would automatically switch between the preferred and non-preferred cellular carriers after some set length of time if the call was not completed on one of the carriers, "effectively addresses the lock-in problem."[5] In addition, the Commission stated that the 17-second time limit it was mandating for the initial call attempt would "also provide additional protection against any lock-in of calls, beyond 17 seconds, with the preferred carrier."[6]

Nokia's multi-mode phones will employ several procedures that will eliminate the likelihood that a 9-1-1 call will be locked in to any one system. First, as with the Automatic A/B Roaming - Intelligent Retry Method, when operating in emergency call mode, Nokia's proposed call completion method will employ a sequential algorithm whereby the handset will automatically attempt the call on another system if the call is not completed on one system. Moreover, if for some reason a system is lost while the handset is operating in emergency mode, the phone will remember the system on which the previous access attempt was made and it will then attempt to complete the call on the next available system. This will help to ensure that the phone will not continually seek to attempt to complete the call on a system that it cannot access.

Second, Nokia would like to clarify that our multi-mode handsets will comply with the time limits for access attempts approved by the Commission for the Automatic A/B Roaming - Intelligent Retry Method.[7] In the *Second Report and Order*, the Commission stated that "the

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[4] *Revision of the Commission's Rules to Ensure Compatibility with Enhanced E-911 Emergency Calling Systems,* Second Report and Order, 14 FCC Rcd 10954 at para. 29 (1999) ("*Second Report and Order*").

[5] *Id.* at para. 35.

[6] *Id.* at para. 41.

[7] In our initial letter requesting approval of our multi-mode call completion method we stated that the time per access attempt for digital systems was controlled by the carrier and thus could exceed 17 seconds. However, this time control is part of the digital standards and is not a bar to a handset moving from one channel to another within a predetermined amount of time. In fact, as noted above and recognizing the Commission's concern about unnecessary delays in emergency call set-up times, Nokia will modify its multi-mode handsets to switch to a subsequent system if the call cannot be completed within 17 seconds if the Commission approves its request.

handset should seek to complete the call with the non-preferred cellular carrier if the preferred cellular carrier has not successfully delivered the call to the landline carrier within 17 seconds after the call is placed."[8] We will apply the same time limit for all channels irrespective of whether the handset is operating in the digital or the analog mode. This means that at a maximum our multi-mode handsets will try to complete a call on a channel (digital or analog, cellular 800MHz or PCS 1900 MHz) for 17 seconds before attempting to complete the call on the next channel.

These steps will substantially reduce any chance that our multi-mode handsets could "lock in" on any one system, and will substantially reduce the time necessary for call set up and completion. In addition, Nokia wishes to clarify and correct for the record a concern raised by the Alliance. In its comments, the Alliance stated that handsets employing our proposed method would spend "an impermissibly long time" trying to access systems that the phone is capable of operating on.[9] However, this reflects a misunderstanding of how our handsets operate to determine whether a channel can be used or not. Rather than spending approximately 10 seconds to make a determination if it may operate on a given channel, the handset makes a quick scan of all channels it is capable of operating on. The amount of time needed to tune the synthesizer to the channel is typically in the range of 20-30 milliseconds. Thus in a worst case, the handset will scan for 42 potential PCS channels and 4 potential 800 MHz digital channels for a total of 46 digital channels, with each of these scans taking a maximum of 30 milliseconds, for a total of 1.380 seconds, before a channel is found. Once the handset has found an available channel (based on RSSI), it will attempt to complete the call immediately. As we stated before, all negative preferences will be overridden.

Nokia is committed to ensuring that consumers using our multi-mode phones are able to contact 9-1-1 rapidly. Our proposal has the advantage of allowing for relatively rapid rollout of these increased capabilities, whereas otherwise consumers would not have them. For reasons that truly are baffling, the Alliance advocates a position that in some instances will delay or even prevent a connection to 9-1-1 where it could be rapid and reliable using digital handset capabilities. Granting the Nokia request will have clear substantial benefits to the public in the increasingly digital world, and we reiterate our request for grant of permission to implement this capability at the soonest possible time.

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[8] *Second Report and Order* at para. 41.

[9] Alliance Comments at 8.

As we noted in our original request, it will take 4 months to implement this new 9-1-1 call completion method, and therefore expedited action was requested. That was on October 27, and referred to the Feb. 13 deadline. We therefore are filing concomitant with this reply a request for waiver of the February 13 deadline for 4 months from Commission action on this request. We request expeditious grant so as to minimize the time necessary beyond February 13.

Respectfully Submitted,

David R. Siddall, Esq.
Counsel to Nokia, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, on this 30th day of December, 1999, I caused copies of the foregoing document to be served by first-class U.S. mail to the following:

Mr. Thomas Sugrue, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Ms. Kris Monteith
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
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Ms. Nancy Boocker
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
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Mr. Daniel Grosh
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Mr. Marty Liebman
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Mr. Carl Hilliard
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Vice President, General Counsel
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Industry Association
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Vance W. Schuemann

EXHIBIT D

The Implementation of the 17-Second Requirement Did Not, Does Not and Will Not Require Any Change to the Commission's Analog Cellphone Standards

In section III of their Comments on Petition for Declaratory Ruling and ExParte Response of WCA and in discussions with the Commission, the Cellphone Manufacturers have asserted that WCA is incorrectly reading or falsely representing the analog cellular standards and the requirements imposed on the industry in the *Second Report and Order*. More specifically, the Cellphone Manufacturers contend that implementation of the 17-Second Requirement, as interpreted by WCA, would require massive changes to the standards promulgated by the Commission for analog cellphone calls. However, the industry is categorically wrong.

The Second Report and Order is a very clear and specific instruction to the cellular handset manufacturer whose product operates at any time in the analog mode. Those handsets must improve the ability of the caller to reach help when 911 is dialed. Three methods were approved by the Commission for the manufacturer to select from. None of these approved methods were then part of the analog "standards". All of the approved methods were departures from the status quo. However, each of these approved methods could have been implemented in 1999 and can be implemented now by the handset manufacturer ***without any change to the analog cellular compatibility standards***, because each of these methods directs how the handset will treat a specific type of call – an emergency call. The analog cellular compatibility standards do not distinguish between types of calls originated by the handset. The Commission directed the handset manufacturer to make this differentiation of emergency calls and to choose one of the approved methods to handle this call type.

The industry argues that extensive changes in standards would be required under WCA's reading of the *Second Report and Order*. The industry's mischaracterization of Petitioner's position is reflected in the following statement:

> In short, because it would demand extensive signaling -- from the handset to the wireless base station to the landline carriers or the public safety answering point ("PSAP"), and then back to the landline carrier to the base station to the handset – plaintiffs' proposed interpretation of "call completion" would require radical changes to the standardized methods by which analog calls are made and completed.

Cellphone Manufacturers' Joint Petition for Declaratory Ruling at 5.

Petitioners are seeking nothing of the sort. The implementation of the 17-Second Requirement did not necessitate any changes to the Commission's analog standards at the time it was adopted, does not require such changes now and will not cause them in the future. The 17-Second Requirement provides that once both the handset and the base

station are in Conversation State ***as that term is understood pursuant to the Commission's existing analog standards***, the Commission's rules are satisfied. Indeed, two of the phones [redacted] that were tested by plaintiffs' expert, Robert Zicker, ***nearly*** complied with the Commission's rules. These models successfully switched carriers, but did so in 30 seconds rather than the required 17 seconds. The fact that these handsets were able to come close to compliance within 30 seconds under ***existing*** standards proves that all handsets can achieve compliance within 17 seconds under those standards. The near-compliance of these two handsets completely refutes the industry's argument that a change in standards is necessary. *See* Attachment 1 to this Exhibit for test results.

For the same reasons, the Cellphone Manufacturers' contention that implementation of the 17-Second Requirement would necessitate lengthy or expensive changes to base stations or wireless networks is baseless and wrong. To the contrary, no changes to base stations or wireless networks would be necessary.

The Cellphone Manufacturers' further assertion that WCA, in comments filed in the *E911* rulemaking, previously argued that implementation of the 17-Second Requirement as enunciated in the *Second Report and Order* would require a revision of the analog standards, is utterly wrong and highly disingenuous. The WCA comments that the manufacturers cite are taken completely out of context – they were filed with the Commission in March, ***1998***, more than one year before the Commission even adopted the *Second Report and Order*, and they were not directed at the requirements that the Commission actually adopted in the *Second Report and Order*. What WCA actually said in its March, 1998 comments was that in order to make the version of the A/B-IR 911 call completion method that the cellphone industry was proposing in 1998 ***as effective to protect the public as the Adequate-Strongest Signal method***, it would be necessary to change the analog standards. At that time, WCA was advocating that the Commission should adopt the Adequate-Strongest Signal approach rather than the A/B-IR approach as it was then being advocated by the industry. However, this is all water under the bridge. The question of which 911 calling method should be adopted and the issue of what modifications might need to be made to make the A/B-IR method as effective as the Adequate-Strongest Signal method are moot, because, in its *Second Report and Order,* the Commission approved ***both*** the Adequate-Strongest Signal method ***and*** (subject to conditions including the 17-Second Requirement) the A/B-IR method, along with a third 911 calling method. The Commission did not find, and did not need to find, that these calling methods were all of equal efficacy in protecting the public. All the Commission held was that the industry was free to adopt any of the three methods (subject to the conditions the Commission attached to A/B-IR). WCA believes that order was wise, supports it and, in the federal court litigation that it filed along with certain cellphone subscribers, is seeking to enforce it. The Cellphone Manufacturers' assertion that WCA claimed that implementation of the ***17-Second Requirement*** -- a requirement that did not yet exist in March, 1998 – would require changes to the analog standards is therefore a disgraceful attempt to mislead the Commission.

In the following chart, Petitioners respond to specific statements made by the Cellphone Manufacturers on this issue in section III of their Comments on Petition for Declaratory Ruling and ExParte Response of WCA:

Industry Statement	**Fact**
P11 – "WCA's attempt to create a brand-new technical requirement based on the SAT and the Fade Timer is severely flawed."	WCA did not create this requirement, it is found in the Second R&O at 41 and footnote 52.
P11 – "…receipt of SAT by the base station does not confirm that voice communications has been delivered to the base station."	TIA/EIA 553-A section 3.6.4.2 is titled "Initial Voice Channel Confirmation". The receipt of the correct SAT by the base station is and always has been the only method that the analog cellular system uses to determine that an active path exists between the mobile station and the base station over which voice communications can occur. Only upon receipt of the correct SAT will the land station move to the Conversation Task.
P12 – "TIA/EIA 553-A does not require, or allow for, the handset to do anything more than to transpond the SAT. The receipt of SAT is at the base station…"	TIA/EIA 553-A Section 2.4 "Supervision" specifies in 2.4.1 what tones can comprise SAT and when it will be transponded; 2.4.1.1 specifies how the mobile and land station will detect and identify which if any SAT is being received; 2.4.1.2 specifies how the mobile station will transmit the SAT; 2.4.1.3 specifies how SAT loss will control the Fade Timer. Section 2.6.4 "Mobile Station Control on the Voice Channel" specifies in 2.6.4.2 how SAT will be used to confirm the Initial Voice Channel; 2.6.4.3.1, 2.6.4.3.2 and 2.6.4.4 each specify how the mobile station must use SAT to determine if received orders are valid or should be ignored.
P12 – "Under the current technical standard, SAT merely informs the base station that a voice channel is in use, and if not, the base station disconnects the call. That is all that SAT does."	

Industry Statement	**Fact**
P13 - "SAT does not automatically switch the call to another network."	The inability of the base station to hear the handset is what the Second R&O specifies as the trigger to the handset to seek the non-preferred system to complete the 911 call.
P13 – "Contrary to WCA's assertion, there is no time specified in the standard for the base station fade timer."	The base (land) station fade timer is defined in TIA/EIA 553-A by its deferring to the mobile station timer specification. TIA/EIA 553-A is titled "Mobile station – Land Station Compatibility Specification". Many of the critical compatibility specifications are only defined in the Mobile section, but must be adhered to by the land station as well. Once a specification has been defined in the Mobile Station section, the Land Station section is simply marked "reserved". The Land Station performs each such task using the Mobile Station section definition. These definitions are found in the "Security and Identification" section, the "Supervision" section, the "Malfunction Detection" section and "Loss of Radio Continuity" section. It would be impossible to maintain compatibility with the Mobile Station if it were otherwise. For example, the Mobile Station specification 2.4.1.1 "Sat Detection" describes how the receiving station will determine which SAT, if any, is being detected. The Land Station is charged in multiple locations with recognizing if the correct SAT is being received. However, the corresponding Land Station specification 3.4.1.1 is marked "reserved". The intent could not be interpreted as a failure of the standard to specify this function, but simply that the Mobile Station section has already described how this task will be accomplished. The same

Industry Statement	**Fact**
	holds true for each of the other "reserved" definitions. These are 3.3 "Security and Identification" which contains; "Mobile Identification Number", "Serial Number", "Station Class Mark", "Registration Memory", "Access Overload Class", "Access Method", "First Paging Channel", "Home System Identification" and "Local Control Option"; 3.4.1.3 "Fade Timing Status"; 3.4.2 "Signaling Tone Detection"; 3.5 "Malfunction Detection"; and 3.6.4.1 "Loss of Radio Channel Continuity".
P13 – "This task does not entail any changes to the call set-up process such as instructing the handset to access a non-preferred carrier's system; rather, it allows the handset to reinitiate the normal call process."	The Second R&O clearly states that it requires a new call process to be established for calls to 911 and allows the manufacturer to choose from three approved methods.
P13 – "This task does not entail any changes to the call set-up process such as instructing the handset to access a non-preferred carrier's system; rather, it allows the handset to reinitiate the normal call process."	The Second R&O clearly states that it requires a new call process to be established for calls to 911 and allows the manufacturer to choose from three approved methods.
P14 – "…the SAT could come across clearly to the base station but the voice channel could suffer from degradation, leading to communications that would be unintelligible."	SAT is carried on the same channel that carries the voice, degradation to the voice channel would also degrade the SAT.
P14 – "The A/B-IR methodology, as proposed and adopted by the Commission, specifically permitted up to three attempts on the preferred carrier, each of an indeterminate length."	The Second R&O specifically talks to the three attempt proposal and states its concern that this would consume far too much time. The Commission clearly states that it will limit the period of time from when the call is sent to when it is successfully delivered to the landline carrier to no more than 17 seconds.

Industry Statement	**Fact**
P15 – "Furthermore, because the handset may attempt to acquire a voice channel assignment from the preferred provider more than a single time, it is conceivable that voice channel assignment could occur within sixteen seconds (two scans on the preferred carrier, each taking eight seconds), thereby causing the fade timer to begin at the sixteenth second.	See comments immediately above.
P15 – "Finally, SAT is exclusively an analog technology.	The Second R&O is directed to calls technology placed to 911 from handsets operating in the analog mode. That includes dual-mode and multi-mode in analog mode.

ATTACHMENT 1 TO EXHIBIT D

Summary of Test Results

The test results can be divided into three categories.

1. Failure to switch at all. Twelve phones, the [redacted] failed to switch even when there was no control channel signal from the preferred network.

2. Failure to switch in the lock-in scenario. Thirty-one phones, the handsets listed in 1. above and [redacted] failed to switch when the handset signal on the preferred network assigned voice channel was not received by the base station.

3. Near-Compliance. Two phones, the [redacted], successfully switched when the preferred network failed to complete the call to 911, but did so in thirty seconds rather than seventeen. This proves that compliance under existing standards is possible.

EXHIBIT E

The Cellphone Manufacturers' Non-Compliance with the Commission's Requirements Is Not Excused Merely Because No Victims of Lock-In Have Come Forward Recently

The Cellphone Manufacturers argue that their non-compliance with the Commission's anti-lock-in requirements should be excused because no victims of lock-in have appeared before the Commission recently. However, this argument is unworthy of an industry that claims to be serving the public. One might as well argue that compliance with the laws forbidding passengers to bring weapons on airplanes should be excused because there have been no hijackings recently, or that polluters are entitled to dump carcinogens into the water supply in violation of the Clean Water Act because no cancer victims have come forward lately. Prior to adopting the *Second Report and Order*, the Commission heard from victims who suffered serious injury, or whose family members died, as a result of lock-in. The Commission adopted the 17-Second Requirement precisely because it found that compliance with it was necessary to try to prevent further deaths and injuries caused by lock-in. Neither the Commission nor WCA are obligated to, nor should they be expected to, come forward with additional victims of the defendants' non-compliance in order to enforce requirements that the Commission duly and validly enacted four and one-half years ago.

One simple reason why no victims of lock-in have visited the Commission ***recently*** is that there has been no occasion for them to do so. There has been no rulemaking proceeding addressing the lock-in problem since the Commission issued the *Second Report and Order* in 1999. Moreover, until very recently, nobody outside the industry knew that the Cellphone Manufacturers were failing to comply with the 17-Second Requirement. Accordingly, no proceeding had been initiated to enforce the 17-Second Requirement or sanction any violation thereof. Even now, the only issue before the Commission is what the agency's existing requirements mean, not whether anyone has died lately as a result of any violation of them. Accordingly, it would seem to be unnecessary for additional victims of lock-in to visit the Commission and make themselves known to the press and the public.

Satisfying the Cellphone Manufacturers' demand to bring forth additional victims would be difficult. Victims of lock-in cannot self-identify because they never know what caused their 911 calls not to go through. Proof of the reasons for the failure to connect rests with the cellphone carriers, who routinely discard their internal records of the mechanics of individual unsuccessful calls within a short time after the call is attempted. However, it is beyond doubt that lock-in is still occurring, and that 911 callers are still suffering harm from it. In excess of 1.5 million wireless 911 calls per year fail to achieve a connection, and more than 5.5 million experience difficulty in call completion. The point, though, is this: People died and requirements were imposed by an agency of the United States government to protect the public from that peril. How many deaths or injuries do there have to be before those requirements are complied with?